

REMARKS

Applicants thank the Examiner for review of the Preliminary Amendment submitted with the RCE. Independent Claim 19 had been amended in the Preliminary Amendment, to specify that the particulates are at least partly covered or encapsulated by about 10 % to about 90% by wt of an encapsulating or covering material, raising new issues as to patentability. Support for this subject matter may be found throughout the Specification, and for example at page 3, lines 13-19. The Final Office Action does not provide a reason as to why it is a first Office Action Final.

While the Office Action dated 12/7/2007 characterizes Cain '938 as having something to do with "encapsulation," Cain '938 at the cited passage of Col. 5, lines 46-65 is completely silent regarding encapsulation. In contrast, Cain '938 merely teaches blending fat and sugar, i.e., "mixing thoroughly" (not creating particles where one is enrobed in another).

Applicants respectfully request that the finality of this Office Action be withdrawn.

Applicants also respectfully request that the rejection be reconsidered on its merits, and withdrawn.

Presently, claim 19 has been amended by incorporating the subject matter of claim 11, which has been canceled, without prejudice. This amendment has been made to emphasize that the triglyceride fat in the composition is made up of at least 20% wt of saturated fatty acid moieties (H3, such as palmitic fatty acid). This certainly results in more saturated fatty acid moieties overall than Cain '938. Saturated fat is hard fat and less amenable to melting, as one skilled in the art would appreciate. These properties are critical for the particulate creamer, whitener or non-dairy cream alternative according to the present invention. The particulate form and particle size are critical for the encapsulated product as claimed.

Claim 12 has been canceled, without prejudice.

The Present Invention

The present invention as set forth in the independent claim 19 is directed to a creamer, whitener or non-dairy cream alternative comprising 10-100% by wt of particulates, said particulates comprising:

about 20-85% by wt of a matrix material comprising a protein selected from the group consisting of a dairy protein, hydrolysed protein, gelatin, soy protein, and mixtures thereof; and

about 15-80% by wt of triglycerides of fatty acids, wherein of said triglycerides the amount of triglyceride of 3 saturated fatty acids of 16 or more carbon atoms (H3) is at least 20% wt based on the total amount of triglycerides; wherein of said triglycerides the amount of triglyceride of 3 saturated fatty acids of 16 or more carbon atoms (H3) and triglyceride of 2 saturated fatty acids of 16 or more carbon atoms and 1 cis-unsaturated fatty acid (H2U) taken together is at least about 55% by wt based on the total amount of triglycerides;

wherein at least 60% by weight of the particulates has a size of 10-600 μm ; wherein said triglycerides of fatty acids are dispersed in said matrix material as discrete regions; and

wherein said particulates are at least partly covered or encapsulated by about 20 % to about 80% by wt of an encapsulating or covering material.

Support for the claimed terms may be found throughout the Specification, and for example at page 3, lines 13-19; and page 8.

The present invention as set forth in the independent claim 20 is directed to a soup or sauce concentrate composition.

Claim 26, which is dependent on claim 19, is directed to a process of preparing a liquid or pasty sauce, soup or concentrate of such a soup or sauce using the creamer, whitener or non-dairy cream alternative according to claim 19.

Support for the claimed elements may be found throughout the specification and particularly at page 3, lines 13-19; page 7, line 21 (soup and sauce concentrates).

35 U.S.C. § 103

Claims 3, 4, 9-13, 19-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Cain, et al., US 5,718,938 in view of Bodnar, et al., US 2002/0098275.

Claim 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Cain, et al., US 5,718,938 in view of Bodnar, et al., US 2002/0098275, and further in view of Cain et al., US5,756,143.

According to the previous Office Action referenced in this Office Action, Cain '938 discloses a bakery fat composition and food products containing the composition comprising a mixture of triglycerides, column 1, lines 35-48; Cain's invention contains mixtures of saturated fatty acids having triglycerides with 16 or more carbon atoms and triglyceride fatty acids with 16 or more carbon atoms with cis-unsaturated fatty acids, column 2, lines 18-43.; The invention contains 5-80 wt. % of fat, 0-50 wt. % of water, 0-4 wt. % of salt, 20-80 wt. % of flour and 0-15 wt. % of leavening agents.; Cain describes a triglyceride ingredient B that is the same ingredient as Applicants H3 and an ingredient A that is the same as Applicants H2U, column 3, lines 16-31.; These ingredients are combined to form a fat mixture containing 10-75 wt. % H3 or S3 and 0-90 wt. % H2U or SUS.; column 4, line 62 – column 5, line 34.; Therefore, H3+H2U may incorporate up to 100 wt. % of the fat ingredient.; Also the percentages of H and U, and the ratio of H3:H2U may be any varying range within 10—75 wt. % H3 or S3 and 0-90 wt. % H2U or SUS of the fat composition.

Further, according to the Office Action, Cain '938 Cain teaches that the composition comprising a mixture of triglycerides is blended until it becomes a homogenous mass and then it is combined with additional ingredients to create dough, column 4, line 53 – column 5, line 55. The Examiner interprets Cain '938, with which Applicants strongly disagree, as disclosing that the fat blend is partially covered or

encapsulated by a sugar matrix and dispersed within a salt egg and flour matrix, referring to col. 5, lines 46-65.

The Office Action admits that Cain '938 does not teach

- (1) the particulate size of the composition;
- (2) the process by which the composition is dried;
- (3) the addition of protein to the homogenous mass of fat mixture containing a particulate size of 1-1000 nm;
- (4) that the food product is a sauce, soup or soup concentrate;
- (5) the addition of herbs, spices or vegetable powder to the homogenous mass of fat mixture in order to create a creamer or non-dairy creamer, flakes, cubes or particulate broths for soups or sauces.

Bodnar is cited for the protein and the Office Action is not persuaded by the intended use of the composition.

With reference to Claim 26, according to the Office Action, as stated above, Cain '938 teaches that the composition is blended until it becomes a homogenous mass and then it is combined with additional ingredients to create dough for cookies, cakes, puff pastries, etc., column 1, lines 5 – 28; column 5, line 48 – column 6, line 5.; Cain teaches that the composition is intended to become a percentage of a food product. ; Cain '143 discloses a blend of long-chain triglycerides and saturated fats, column 3, line 25 – column 5, line 20.; Cain '143's invention may be used for all types of food products, including spreads, margarine, bakery products, sauces, soups and dressings.; In Examples V and VI the fat blend is used to make sauces and dressings.; The inventive oil blend incorporates 25.0 wt. % of a range style dressing prepared in Example VI. The Office Action concludes that, given Cain'938's incorporation of the inventive long-chain triglyceride blend of the Cain '143 patent in sauces, soups and dressings, it would have been obvious for a person of ordinary skill in the art at the time this invention was made to have used Cain's bakery fat composition in a sauce, soup or soup concentrate.

Applicants respectfully traverse.

Applicants respectfully submit that the claims are not obvious over the cited references. There is no predictability, suggestion or incentive in any or all of the cited references to use the particulates of the present invention in a creamer, whitener or non-dairy alternative in order to attain a creamer, whitener or non-dairy alternative which is low in trans-unsaturated fatty acids, exhibits good organoleptic and physical properties, and is low in lauric acid. Use of such creamer in cream-style soups is likewise not predictable. The particular fat mixtures selected according to the present invention in combination with a protein matrix have the appropriate physical properties in terms of melting behaviour, crystallization behaviour, brittleness, organoleptic properties, taste, as well as physical and chemical stability.

Cain, U.S. 5,718,938 discloses manufacturing a batter, a dough, and bakery products such as cookies and cakes with lower than normal SAFA (saturated and trans fatty acid residues). Such baked goods are usually non-savory applications (usually sweet) and usually not dry. Thus, a person of ordinary skill in the relevant art of dry savory foodstuffs like particulate soup and sauce concentrates, would not find it predictable to come up with the present invention based on the cited art. This is particularly because the claimed applications of the claimed encapsulated particulates require and were selected so as to achieve the resulting product appropriate physical properties in terms of melting behaviour, crystallization behaviour, brittleness, organoleptic properties, taste, as well as physical and chemical stability.

Additionally, Cain '938 does not disclose or suggest use of higher inventive amounts of H3+H2U. Cain '938 Abstract discloses the use of a fat blend containing an S3 (similar to H3 in the present invention) and S2U (similar to H2U in the present application) of greater than 35%, whereas the present application claims for such fats at least 55%. Cain '938 does not make predictable the selection of fats according to the

present invention. This selection provides the unique properties needed for the particular claimed applications. This selection and the unique properties lend a point of difference to the particular end use presently claimed. Moreover, the particular properties needed are uniquely selected and are not a matter of mere experimentation.

Bodnar fails to cure the deficiencies of Cain '938. A person of skill in the art would not find it predictable to come up with the present invention in particulate matter as claimed. The cited references do not disclose such particulate matter. Applicants respectfully submit that in order to manufacture a fat-containing matter in particulate form, which also should perform well in terms of e.g. fat-staining, the fat will need to meet certain requirements in terms of melting behavior which are entirely different from the melting behavior fats need to perform in batter and dough. Thus, a person of ordinary skill in the relevant art would not find it predictable to come up with the savory particulate composition according to the present invention on the basis of the cited art.

Specifically, the relevance of Bodnar to the present invention is not understood. The Bodnar compositions by no means fulfill the claimed requirements with respect to the presence of certain triglycerides nor the level of saturated fatty acid moieties (saturated fat is solid fat). The oil of Bodnar is essentially free of solid matter at ambient temperature. While the present invention relates to particulate matter, Bodnar is directed to microemulsions that are transparent or translucent and that contain relatively large amounts of water. See Abstract and Para. 12. Bodnar's compositions are fully liquid and are particularly not suitable for encapsulation. Also, not being solid at all, the Bodnar compositions will be very prone to staining.

With reference to claim 26, Cain, US5,756,143 fails to disclose or suggest, and therefore fails to cure the deficiencies of Cain '938 and Bodnar as to:

- (1) particulate form of composition and the particulate size;

(5) the addition of herbs, spices or vegetable powder to the homogenous mass of fat mixture in order to create a creamer or non-dairy creamer, flakes, cubes or particulate broths for soups or sauces; and

(6) that the particulates are at least partly covered or encapsulated by about 10 % to about 90% by wt of an encapsulating or covering material

Example V of Cain '143 only mentions mayonnaise type sauces and not savory sauces to which the present invention is directed. Likewise, Example VI of Cain '143 is directed to ranch style salad dressing and not savory sauces to which the present invention is directed. Cain '143 focuses on delivery of long chain polyunsaturated fatty acids. It is directed to liquid oil. See Col 2, lines 47-48. In contrast, the present invention uses particulates made of relatively solid fat encapsulated in a protein matrix.

An obviousness rejection is proper only when "the subject matter as a whole would have been obvious at the time the invention was made ..." (emphasis added). 35 U.S.C. 103. Applicants respectfully submit that the Office Action has improperly chosen certain aspects of one reference and combined them with aspects of other references, without showing where the motivation is to combine them to come up with the subject matter of the present invention as a whole, within the meaning of 35 U.S.C. 103. Applicants submit that the pending claims are not obvious over the cited references, under 35 U.S.C. 103, especially in view of the present Amendment. Reconsideration and withdrawal of the rejection is respectfully requested.

Additionally to the discriminating feature of minimum safa level compared to maximum safa levels described in the prior art, the teaching in the prior art is mainly relating to supplying nutrition via the delivery of unsaturated fatty acid by controlling/limiting the level of saturated fatty acids. Thus, the cited art relates to more liquid products with preferentially low levels of solid fat at temperatures such as the body temperature reflected in limitations of the N35, solid fat content at 35 C.

This type of fat compositions being particularly soft due to the limitation in saturated fat but still functional for the desired applications will not be able to deliver the major functional aspect of the invention at hand. This means than long term storage at ambient to elevated temperature has to be withstood without oiling out, fat staining and the delivery of off flavours. None of the formulations cited in the prior art will allow to deliver this functionality. On top of this it is at least for Bodnar certainly and for Cain & Cain practically impossible to spray coat to fabricate the desired creamer. This is due to the structure of the material at elevated/ambient temperatures. The liquid will not be present as distinct particles to be encapsulated. The materials according to Cain will also due to their soft structure coalesce and form large lumps not suited for the production of particulate matter suited to be used as a creamer.

As the Office Action has not cited a reference relating to particulate soups or sauces, and inter alia, for the reasons above, a prima facie case of obviousness is lacking. Accordingly, the obligation has not arisen for Applicants to provide supporting factual evidence in addition to that in the Specification.

Accordingly, the claims are deemed to be in condition for allowance.

CONCLUSION

Reconsideration of the rejection is respectfully requested in view of the above claim amendments and remarks. It is respectfully requested that the application be allowed to issue.

If a telephone conversation would be of assistance, Applicant's undersigned attorney invites the Examiner to telephone at the number provided.

Respectfully submitted,

/Ellen Plotkin/

Ellen Plotkin
Registration No. 36,636
Attorney for Applicant(s)

201-894-2253